

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (ORIGINAL) Seed of corn inbred line designated HC53, representative seed of said line having been deposited under ATCC Accession No. _____.
2. (ORIGINAL) A corn plant, or parts thereof, produced by growing the seed of claim 1.
3. (ORIGINAL) Pollen of the plant of claim 2.
4. (ORIGINAL) An ovule of the plant of claim 2.
5. (ORIGINAL) A corn plant, or parts thereof, having all of the physiological and morphological characteristics of the corn plant of claim 2.
6. (CURRENTLY AMENDED) The corn plant of claim 2, wherein said plant is ~~male~~ sterile detasseled.
7. (ORIGINAL) A tissue culture of regenerable cells from the corn plant of claim 2.
8. (CURRENTLY AMENDED) [[A]] The tissue culture according to claim 7, wherein the cells or protoplasts of the tissue culture ~~being from a tissue~~ are selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
9. (CURRENTLY AMENDED) A corn plant regenerated from the tissue culture of claim 7, wherein the regenerated plant ~~is capable of expressing all the~~ having all of the morphological and physiological characteristics of inbred line HC53.
- 10 - 32. (CANCELED)
33. (NEW) A method for producing a transgenic corn plant comprising transforming the corn plant of claim 2 with a transgene wherein the transgene confers a characteristic selected from the group consisting of: herbicide resistance, insect resistance, resistance to bacterial disease, resistance to fungal disease, resistance to viral disease, male sterility and corn endosperm with improved nutritional quality.

34. (NEW) A transgenic corn plant produced by the method of claim 33.
35. (NEW) A method of producing a male sterile corn plant comprising transforming the corn plant of claim 2 with a transgene that confers male sterility.
36. (NEW) A male sterile corn plant produced by the method of claim 35.
37. (NEW) A method of producing an herbicide resistant corn plant comprising transforming the corn plant of claim 2 with a transgene that confers herbicide resistance.
38. (NEW) A herbicide resistant corn plant produced by the method of claim 37.
39. (NEW) A method of producing an insect resistant corn plant comprising transforming the corn plant of claim 2 with a transgene that confers insect resistance.
40. (NEW) An insect resistant corn plant produced by the method of claim 39.
41. (NEW) A method of producing a disease resistant corn plant comprising transforming the corn plant of claim 2 with a transgene that confers disease resistance.
42. (NEW) A disease resistant corn plant produced by the method of claim 41.
43. (NEW) A method of introducing a desired trait into corn inbred line HC53 comprising:
 - (a) crossing the HC53 plants, grown from seed deposited under ATCC Accession No. PTA-_____, with plants of another corn line that comprise a desired trait to produce F1 progeny plants, wherein the desired trait is selected from male sterility, herbicide resistance, insect resistance, corn endosperm and resistance to bacterial, fungal or viral disease;
 - (b) selecting F1 progeny plants that have the desired trait to produce selected F1 progeny plants;
 - (c) crossing the selected F1 progeny plants with the HC53 plants to produce first backcross progeny plants;
 - (d) selecting for first backcross progeny plants that have the desired trait and physiological and morphological characteristics of maize inbred line HC53 to produce selected first backcross progeny plants; and
 - (e) repeating steps (c) and (d) one or more times in succession to produce selected

second or higher backcross progeny plants that comprise the desired trait and all of the physiological and morphological characteristics of maize inbred line HC53 as described in the Variety Description Information and as determined at a 5% significance level when grown in the same environmental conditions.

44. (NEW) A plant produced by the method of claim 1, wherein the plant has the desired trait and all of the physiological and morphological characteristics of corn inbred line HC53 as described in the Variety Description Information and as determined at a 5% significance level when grown in the same environmental conditions.